Homework:

1. New Clarendon Park is undergoing renovations to its gardens. One garden that was originally a square is being adjusted so that one side is doubled in length, while the other side is decreased by three meters. The new rectangular garden will have an area that is 25% more than the original square garden. Write an equation that could be used to determine the length of a side of the original square garden. Explain how your equation models the situation. Determine the area, in square meters, of the new rectangular garden.
2. A rectangular lawn measuring 8 meters by 4 meters is surrounded by a flower bed of uniform (the same) width. The combined area of the lawn and the flower bed is 165 m2. What is the width of the flower bed?
3. The length of a rectangle is 7 units more than its width. If the width is doubled and the length is increased by 2, the area is increased by 42 square units. Find the dimensions of the original rectangle.
4. Joe’s rectangular garden is 6 meters long and 4 meters wide. He wishes to double the area of his garden by increasing its length and width by the same amount. Find the number of meters by which each dimension must be increased.